Dr. F. J. Ryan Dept. Zoology Columbia Univ. New York 27,N.Y.

Dear Francis:

I appreciated your news-full letter very much; this is only an interlocutory reply.

Esther is revising her long thesis for publication as a short paper. She will sond you either a microfilm of the thesis or a draft ms, if she can finish it in a reasonable length of time.

Wainright is well known here from his papers: judgin from them, you're fortunate to have him with you.

I would be interested to see the statistical analyses extending Lea and Coulson. If you acquire the citations, would you pass them on?

Nothing very definite has been heard from Tom Nelson, except that he doesn't sound too keen (to say the least) about prolonging his present job. I Bidn't mean to be so arch, or to start any guessing games about actinomycetes— all I had in mind was the obvious, to test the occurrence of heterokaryosis or sexuality. The former is pretty definite (although a formal proof based on single-hyphal isolation will be difficult), and the possibility of the latter is at least encouraging. The frequency of sexual recombinations, if any, is not nearly so high as some morphological accounts (e.g. Klieneberger-Nobel) would hold.

Sincerely,

Joshua Lederberg